

SUBSTITUTE ABSTRACT

An analyzer determines frequency and amplitudes of an audio signal represented by sinusoids for transmission transmitted to a receiver decoder which includes a synthesizer to reconstruct the audio signal. A pitch detector determines the pitch for transmission to the receiver along with the structure of the spectrum of the speech signal. The structure of the spectrum is often transmitted in the form of LPC parameters. To correct for frequency changes of the periodic component of an audio signal, a frequency change determiner determines a change of the frequency of the periodical component over the analysis period. This change of frequency is transmitted to the decoder for increasing the accuracy of the reconstruction of the audio signal. Further, the frequency change is only used to obtain a more accurate value of the pitch. The frequency change is determined by using a time warper which performs a time transformation such that a time transformed audio signal is obtained with a minimum frequency change.